

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-25. (Cancelled).

26. (Currently Amended): A purified polynucleotide comprising ~~an open reading frame of the Rv3908 gene of *M. tuberculosis* (SEQ ID NO: 30)~~ SEQ ID NO: 30, wherein codon 48 of SEQ ID NO: 30 is GGG, or a polynucleotide fully complementary thereto.

27. (Cancelled).

28. (Previously Presented): The purified polynucleotide as claimed in claim 26, which comprises SEQ ID NO: 3, SEQ ID NO: 4, or both SEQ ID NOS: 3 and 4, or the complement of SEQ ID NO: 3, SEQ ID NO: 4, or both SEQ ID NOS: 3 and 4.

29. (Currently Amended): A purified polynucleotide comprising ~~an open reading frame of the *MutT2* gene of *M. tuberculosis* (SEQ ID NO: 29)~~ SEQ ID NO: 29, wherein codon 58 of SEQ ID NO: 29 is CGA, or a polynucleotide fully complementary thereto.

30. (Cancelled).

31. (Previously Presented): The purified polynucleotide as claimed In claim 29, which comprises SEQ ID NO: 1, SEQ ID NO: 2, or both SEQ ID NOS: 1 and 2, or the complement of SEQ ID NO: 1, SEQ ID NO: 2, or both SEQ ID NOS: 1 and 2.

32. (Allowed): A purified polynucleotide consisting of a nucleotide sequence selected from: (A) SEQ ID NO: 1; (B) SEQ ID NO: 2; (C) SEQ ID NO: 3; (D) SEQ ID NO: 4; (E) SEQ ID NO: 5; (F) SEQ ID NO: 6; (G) SEQ ID NO: 7; and (H) SEQ ID NO: 8.

33. (Allowed): A purified polynucleotide that hybridizes specifically under stringent conditions with one or more polynucleotide sequences selected from SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, and SEQ ID NO: 8.

34. (Allowed): A kit for detecting *M. tuberculosis*, said kit comprising:

(A) a polynucleotide probe that hybridizes under high stringency conditions with a purified polynucleotide selected from SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, SEQ ID NO: 30, and SEQ ID NO: 31; and

(B) reagents to perform a nucleic acid hybridization reaction.

35. (Allowed): A kit for detecting *M. tuberculosis*, said kit comprising:

(A) at least one primer pair selected from (i) SEQ ID NO: 1, and SEQ ID NO: 2; (ii) SEQ ID NO: 3, and SEQ ID NO: 4; (iii) SEQ ID NO: 5, and SEQ ID NO: 6; and (iv) SEQ ID NO: 7, and SEQ ID NO: 8; and

(B) reagents to perform a nucleic acid amplification reaction.

36. (Allowed): An *E. coli* strain containing the plasmid pMYC2501 deposited at the C.N.C.M. on Aug. 20, 2001, under Accession No. I-2711.

37. (Allowed): An *E. coli* strain containing the plasmid pMYC2502 deposited at the C.N.C.M. on Aug. 20, 2001, under Accession No. I-2712.

38. (Allowed): An *E. coli* strain containing the plasmid pMYC2503 deposited at the C.N.C.M. on Aug. 20, 2001, under Accession No. I-2713.

39. (Allowed): A purified polynucleotide sequence delimited upstream by the polynucleotide sequence of SEQ ID NO: 1 and downstream by the polynucleotide sequence of SEQ ID NO: 2, wherein the purified polynucleotide sequence comprises SEQ ID NO: 29.

40. (Allowed): A purified polynucleotide sequence delimited upstream by the polynucleotide sequence of SEQ ID NO: 3 and downstream by the polynucleotide sequence of SEQ ID NO: 4, wherein the purified polynucleotide sequence comprises SEQ ID NO: 30.

41. (Allowed): A purified polynucleotide sequence delimited upstream by the polynucleotide sequence of SEQ ID NO: 5 and downstream by the polynucleotide

sequence of SEQ ID NO: 6, wherein the purified polynucleotide sequence comprises SEQ ID NO:27.

42. (Allowed): A purified polynucleotide sequence delimited upstream by the polynucleotide sequence of SEQ ID NO: 7 and downstream by the polynucleotide sequence of SEQ ID NO: 8, wherein the purified polynucleotide sequence comprises SEQ ID NO: 28.

43. (Allowed): A purified polynucleotide sequence originating from a gene of *M. tuberculosis* comprising a mutator allele.

44 (Cancelled).

45. (Allowed): A polynucleotide selected from: a purified polynucleotide of 1488 bp designated as *alkA* and consisting of SEQ ID NO: 27; a purified polynucleotide of 495 bp designated as *ogt* and consisting of SEQ ID NO: 28; a purified polynucleotide of 423 bp designated *mutT2* and consisting of SEQ ID NO: 29; a purified polynucleotide of 744 bp designated *Rv3908* and consisting of SEQ ID NO: 30; a purified polynucleotide of 912 bp designated *mutY* and consisting of SEQ ID NO: 31; a purified polynucleotide of 2406 bp designated *Rv3909* and consisting of SEQ ID NO: 32.

46. (Allowed): A polynucleotide selected from: a purified cDNA comprising SEQ ID NO: 27 (*alkA*); a purified cDNA comprising SEQ ID NO: 28 (*ogt*); a purified cDNA

comprising SEQ ID NO: 29 (mutT2); a purified polynucleotide comprising SEQ ID NO: 30 (Rv3908); a purified cDNA comprising SEQ ID NO: 31 (mutY); and a purified cDNA comprising SEQ ID NO: 32 (Rv3909).

47. (Allowed): A polynucleotide selected from: a purified polynucleotide comprising SEQ ID NO: 6, a purified polynucleotide comprising SEQ ID NO: 7, and a purified polynucleotide comprising SEQ ID NO: 8.

48. (Allowed) : The purified polynucleotide sequence of claim 43, delimited upstream by the polynucleotide sequence of SEQ ID NO:1 and downstream by the polynucleotide sequence of SEQ ID NO:2, wherein the purified polynucleotide sequence comprises SEQ ID NO:29, except that codon 58 is CGA instead of GGA.

49. (Allowed) : The purified polynucleotide sequence of claim 43, delimited upstream by the polynucleotide sequence of SEQ ID NO:3 and downstream by the polynucleotide sequence of SEQ ID NO:4, wherein the purified polynucleotide sequence comprises SEQ ID NO:30, except that codon 48 is GGG instead of CGG.

50. (Allowed) : The purified polynucleotide sequence of claim 43 delimited upstream by the polynucleotide sequence of SEQ ID NO:5 and downstream by the polynucleotide sequence of SEQ ID NO:6, wherein the purified polynucleotide sequence comprises SEQ ID NO:27, except that codon 12 is GTC instead of ATC.

51. (Allowed) : The purified polynucleotide sequence of claim 43 delimited upstream by the polynucleotide sequence of SEQ ID NO:7 and downstream by the polynucleotide sequence of SEQ ID NO:8, wherein the purified polynucleotide sequence comprises SEQ ID NO:28, except that codon 37 is CTC instead of CGC.

52. (Allowed) : A kit for detecting *M. tuberculosis* of Beijing genotype that has the MDR phenotype, said kit comprising :

- a) one or more polynucleotide probe selected from the purified polynucleotide sequence as claimed in any one of claims 48 to 51; and
- b) reagents to perform a nucleic acid hybridization reaction.